

RVA SERIES

1/4", 3/8" and 1/2" NPT

150 - 550 PSIG (10.34 – 37.92 Bar)

RVA

SERIES

Description

The Generant Series RVA, Cryogenic Relief Valve is a spring reference over pressure protection device that meets the safety relief valve requirements of ASME BPVC Section XIII. RVA Series valves are designed for use on piping systems or liquid cylinders when an "ASME Coded" relief valve is required. Every RVA Series valve is supplied cleaned and packaged for oxygen service standard. Valves can be ordered factory-preset from 150 to 550 Psig (10.34 to 37.92 Bar) and are permanently locked. Seat and poppet geometry combined with optimized spring ranges provide consistent, high flow at allowable overpressures. The RVA is supplied with a Carbon-Filled PTFE seal.

Features

- **HIGH PERFORMANCE SEAL:** State-of-the-art sealing technology ensures durability and reliability.
- **HIGH FLOW, ASME RATED & NB CERTIFIED:** ASME UV and NB Stamp standard, Certified to 0.764 SCFM/PSIA.
- **LOCKED SETPOINT:** Supplied Factory Preset and Permanently Locked.
- **CONFIGURABLE:** Multiple Port Options and Optional Drain Hole
- **100% FACTORY TESTED:** Tested for Leakage, Crack and Reseat performance.
- **OXYGEN SERVICE COMPATIBLE:** Cleaned and Packaged for Oxygen Service per CGA G-4.1.
- **COLOR CODED LABELS:** Easily identify relief valve set pressure with an easy-to-read color-coded label.

Technical Data

Nominal Set Pressure Range: 150 – 550 PSIG (10.34 to 37.92 Bar)
 Factory Set Tolerance: $\pm 3\%$ of Nominal
 Reseat: $>90\%$ of Nominal Set Pressure
 Zero Leakage to 95% of Set Pressure

Temperature Rating: -320° to 200° F (-196° C to 93° C)
 Full Rated Flow @ 110% of Set Pressure
 Unaffected by up to 10% Back Pressure
 Rated for Gas Service Only. If used for cryogenic media, valve must be installed with vapor barrier piping upstream (candy cane).
 Flow: Rated Slope 0.764 SCFM Air / PSIA

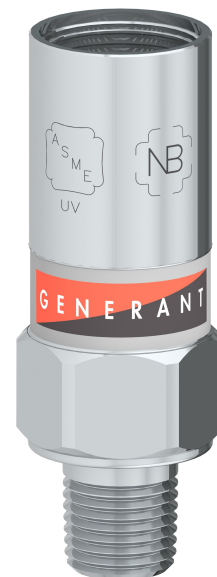
NOTE: FLOW RATING IS DETERMINED BY MULTIPLYING 110% FLOW PRESSURE IN PSIA BY RATED SLOPE.
 E.G. 300 PSIG SET: $((300 \times 110\%) + 14.7)$ PSIA $\times$ 0.764 = 263 SCFM Air

Orifice Area: 0.062 in² (40 mm²)
 Derated Kd Value: 0.667

Materials of Construction

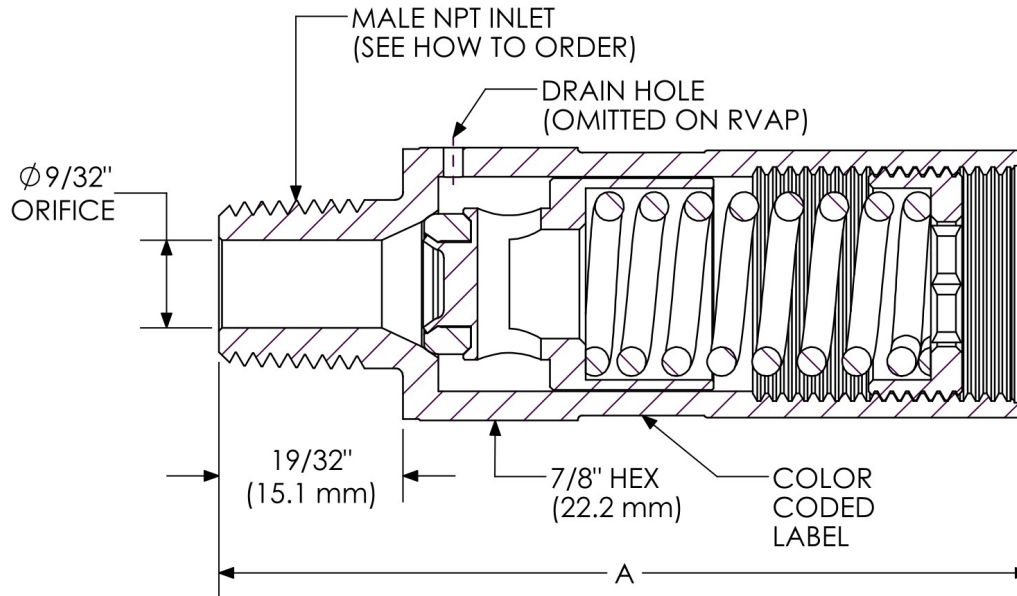
Component	Material Grade	
Body & Poppet	Brass, ASTM B16	316 Stainless Steel, ASTM A479
Spring	17-7PH (ASTM A564)	
Spring Retainer	Brass, ASTM B16	Stainless Steel
Seal	Modified PTFE (25% Carbon-Filled)	
Color Coded Identification Label	Film Coated Vinyl	

NOTE: Lubricated with Krytox™



RVA SERIES RELIEF VALVE

Dimensional Information



PIPE SIZE	DIM. "A"
1/4" NPT	2.6" (66.0 mm)
3/8" NPT	2.6" (66.0 mm)
1/2" NPT	2.8" (71.1 mm)

How To Order

RVA - 250B - CT - 350

SERIES
RVA - Cryogenic Relief Valve, ASME Rated with Drain Hole
RVAP - Cryogenic Relief Valve, ASME Rated without Drain Hole

INLET PIPE SIZE (NPT)
250B - 1/4" Male, Brass
375B - 3/8" Male, Brass
500B - 1/2" Male, Brass
250SS - 1/4" Male, Stainless Steel
375SS - 3/8" Male, Stainless Steel
500SS - 1/2" Male, Stainless Steel

NOMINAL SET PRESSURE
Specify 150 - 550 PSIG (10.34 - 37.92 Bar)

SEAL MATERIAL
CT - 25% Carbon-Filled PTFE (-320° to 200°F)

Pipe-A-Way options with integrated external seal are available (sold separately). Not compatible with the Drain Hole (RVA) option.

PROPER COMPONENT SELECTION – When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.



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